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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/800,725

03/16/2004

Taichi Tanaka

15-048

1026

23400

7590

06/21/2006

POSZ LAW GROUP, PLC
12040 SOUTH LAKES DRIVE
SUITE 101
RESTON, VA 20191

EXAMINER

NGUYEN, TAN QUANG

ART UNIT

PAPER NUMBER

3661

DATE MAILED: 06/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/800,725

Applicant(s)

TANAKA ET AL.

Examiner

TAN Q. NGUYEN

Art Unit

3661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 03/28/2006
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAIL ACTION

Notice to Applicant(s)

1. This office action is responsive to the amendment filed April 27, 2006. Claims 1-10 are still pending.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

- 3.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1, 2, 5, 6, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mattes et al. (2002/0180596) in view of Ishizaki et al. (6,600,412).

7. As per claims 1 and 2, Mattes et al. disclose the invention as claimed which includes means for alleviating a collision impact on a pedestrian (see figure 2, item 10 and paragraph 0016), at least one pressure sensor mounted on the bumper (see figure 2, item 3), an acceleration sensor (see figure 2, item 8), a speed sensor (see figure 2, item 7). Mattes et al. also disclose means for determining whether an obstacle colliding with the vehicle is a pedestrian based on the output signals from the pressure sensors, the acceleration sensor and the speed sensor, and a controller device for actuating the alleviating means when there is a collision with a pedestrian (see figure 2, item 6 and the related text).

8. Mattes et al. do not disclose that the plurality of sensors are mounted on a front bumper of the vehicle and aligned in the longitudinal direction of the bumper. However, Ishizaki et al. suggest a vehicular sensor system for vehicle which includes a plurality of bumper sensors mounted to a front bumper of a vehicle in a spaced relationship in a widthwise direction for detecting the frontal collision of the vehicle with the object (see at least the abstract and the Field of the Invention). It would have been obvious to any ordinary skill in the art to use a plurality of bumper sensors mounted in the widthwise (horizontal) as taught by Ishizaki et al. into the system of Mattes et al. in order to

discriminate an object with increased accuracy (see column 1, lines 40-42, and column 2, lines 28-38).

9. As per claims 5 and 6, Mattes et al. also disclose that the alleviating means is a spring mechanism or a pyrotechnic mechanism for popping up a vehicle hood at an angle (see paragraph 0016).

10. As per claims 8 and 9, Mattes et al. disclose that the alleviating means is an airbag adapted to be inflated on the vehicle hood (see at least paragraph 0016).

11. Claims 3, 4, 7 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mattes et al. and Ishizaki et al. (6,600,412) as applied to the claims above, and further in view of Ishizaki et al. (6,516,278).

12. With respect to claims 3 and 4, Mattes et al. and Ishizaki ('412) disclose the claimed invention as discussed above except for the determination means changes threshold levels for determining that the obstacle colliding with the vehicle is a pedestrian according to the traveling speed of the vehicle. However, such feature is taught by the Ishizaki et al. ('278) reference in at least the abstract. It would have been motivated an ordinary skill in the art to combine the teaching of the Ishizaki et al. ('278) into the combined system of Mattes et al. and Ishizaki et al. ('412) in order to make provide the system with more accurate decision of the when to deploy the alleviating means by varying the threshold values based on how fast the vehicle is running, thereby improving the vehicle safety.

13. As per claim 7, Mattes et al. also disclose that the alleviating means is a spring mechanism or a pyrotechnic mechanism for popping up a vehicle hood at an angle (see paragraph 0016).

14. With respect to claim 10, Mattes et al. disclose that the alleviating means is an airbag adapted to be inflated on the vehicle hood (see at least paragraph 0016).

Remarks

15. All claims are rejected.

16. The following references are cited as being of general interest: Chen et al. (6,326,915), Paranjpe et al. (2002/0030591) and Lutter et al. (2003/0201929).

17. Applicant's arguments filed on April 27, 2006 have been fully considered and they are deemed to be persuasive. Upon the updated search, the new ground of rejection has been set forth above.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Tan Q. Nguyen, whose telephone number is (571) 272-6966. The examiner can normally be reached on Monday-Thursday from 5:30 AM-4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black, can be reached on (571) 272-6956.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

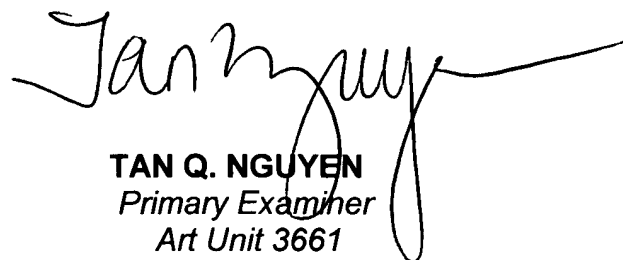
or faxed to the Official Fax Center: (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit: 3661

/tqn

June 13, 2006


TAN Q. NGUYEN
Primary Examiner
Art Unit 3661